



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,323	10/28/2003	Louis P. Steinhauser	5269-000004/CPB	4859

27572 7590 01/17/2007
HARNESS, DICKEY & PIERCE, P.L.C.
P.O. BOX 828
BLOOMFIELD HILLS, MI 48303

EXAMINER

BASINGER, SHERMAN D

ART UNIT	PAPER NUMBER
----------	--------------

3617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	01/17/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/695,323

Applicant(s)

STEINHAUSER, LOUIS P.

Examiner

Sherman D. Basinger

Art Unit

3617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 December 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 5, and 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of Motose et al.

Davis discloses an outboard motor position responsive system comprising an ignition system including the ignition switch sensor 290, an outboard motor position sensor 220 in communication with the ignition system, a microprocessor 100 in communication with the outboard motor position sensor and the ignition system, an alarm 380 in communication with the microprocessor, an ignition disabling switch shown at the bottom of figure 1b and a tilt circuit including the up and down trim solenoid drivers in communication with the microprocessor.

Davis also discloses a means for warning the operator that the outboard motor is tilted up beyond a maximum safe tilt position prior to ignition of the outboard motor, the means being in communication with the microprocessor. See column 27, lines 44-47; column 27, lines 50-52 and column 27, line 67.

When the boat is being launched and the trim of the outboard motor is in the trailering position, the outboard motor is tilted up beyond a maximum safe tilt position.

Davis also discloses a means for disabling an ignition system of the outboard motor to prevent an operator from starting the outboard motor when the outboard motor is tilted up beyond a maximum safe tilt position, the means being in communication with the microprocessor. Again see column 27, lines 44-47; column 27, lines 36 and 37 and column 27, lines 52-55. When the is in the in water startup sequence, if the outboard motor is in the trailering position, which it is then tilted up beyond a maximum safe tilt position, the ignition remains disabled.

Davis does not disclose wherein the communications are via radio frequency signals or via infrared signals; however, Davis does disclose that signals are through microprocessor 100.

Motose et al discloses a plurality of outboard motor sensor signals transmitted using radio waves or infrared signals (column 10, lines 9-17).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to modify Davis such that the signals from the sensors such as the ignition switch sensor 290 and the trim sender sensor 220 are sent to the microprocessor 100 and thereon to the alarm 380 and ignition disable via radio frequency signals or infrared signals in a manner taught by Motose et al. Motivation to do so is to avoid the use of wiring which requires a wiring harness and the placement of the harness.

Art Unit: 3617

Davis also does not disclose a means for automatically lowering the outboard motor prior to ignition of the outboard motor when the outboard motor is tilted up beyond a maximum safe tilt position, the means being in communications with the microprocessor. Davis does disclose in column 8, lines 54 to 55 that in launching the boat from the trailer into the water, the bilge valve is checked and automatically closed. In the in water start up sequence described in column 27, lines 32-55, the microprocessor checks the bilge plug to determine that the bilge of the power boat is not flow communicating with the exterior of the boat and that the outboard is not in the trailering position such that it is tilted up beyond a maximum safe tilt position. Because the microprocessor automatically closes the bilge valve, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to have the microprocessor automatically lower the outboard motor from the trailering position, if it is in the trailering position when in the in water start up sequence. Motivation to do so is to avoid having an operator remember to move the outboard motor from the trailering position to the in water start up position.

3. Claims 2, 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis in view of Beilfuss.

Davis discloses an outboard motor position responsive system comprising an ignition system including the ignition switch sensor 290, an outboard motor position sensor 220 in communication with the ignition system, a microprocessor 100 in communication with the outboard motor position sensor and the ignition system, an alarm 380 in communication with the microprocessor, an ignition disabling switch shown at the bottom of figure 1b and a tilt circuit including the up and down trim solenoid drivers in communication with the microprocessor.

Davis also discloses a means for warning the operator that the outboard motor is tilted up beyond a maximum safe tilt position prior to ignition of the outboard motor, the means being in communication with the microprocessor. See column 27, lines 44-47; column 27, lines 50-52 and column 27, line 67.

When the boat is being launched and the trim of the outboard motor is in the trailering position, the outboard motor is tilted up beyond a maximum safe tilt position.

Davis also discloses a means for disabling an ignition system of the outboard motor to prevent an operator from starting the outboard motor when the outboard motor is tilted up beyond a maximum safe tilt position, the means being in communication with the microprocessor. Again see column 27, lines 44-47; column 27, lines 36 and 37 and column 27, lines 52-55. When the boat is in the in water startup sequence, if the

Art Unit: 3617

outboard motor is in the trailering position, which it is then tilted up beyond a maximum safe tilt position, the ignition remains disabled.

Davis does not disclose that communications are superimposed over existing wiring of a power boat. Using existing wiring to send signals superimposed on the existing wiring is very well known. Beilfuss in 1966 patented a call system for hostleries in which a fire alarm circuit is superimposed on a morning call circuit to allow addition of a fire alarm system to an already existing installation with running additional wiring between the desk and rooms. In view of this teaching it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to superimpose the signals from sensors such as the ignition switch sensor 290 and the outboard motor position sensor 220 of Davis to the microprocessor 100 and thereafter to the alarm 380 and the ignition disable over existing wiring of the power boat of Davis. Motivation to do so is found in Beilfuss in his statement that additional wiring will not have to be run between the sensors, microprocessor and alarms.

Davis also does not disclose a means for automatically lowering the outboard motor prior to ignition of the outboard motor when the outboard motor is tilted up beyond a maximum safe tilt position, the means being in communications with the

Art Unit: 3617

microprocessor. Davis does disclose in column 8, lines 54 to 55 that in launching the boat from the trailer into the water, the bilge valve is checked and automatically closed. In the in water start up sequence described in column 27, lines 32-55, the microprocessor checks the bilge plug to determine that the bilge of the power boat is not flow communicating with the exterior of the boat and that the outboard is not in the trailering position such that it is tilted up beyond a maximum safe tilt position. Because the microprocessor automatically closes the bilge valve, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains to have the microprocessor automatically lower the outboard motor from the trailering position, if it is in the trailering position when in the in water start up sequence. Motivation to do so is to avoid having an operator remember to move the outboard motor from the trailering position to the in water start up position.

Response to Arguments

4. Applicant's arguments filed December 6, 2006 have been fully considered but they are not persuasive. Applicants argue that they have amended the claims to a "means plus function" format under 35 U.S.C. §112 paragraph 6. Accordingly, the claims now recite the specific function of warning an operator or preventing an operator from starting an outboard motor prior to ignition of the outboard motor, when the outboard motor is tilted up beyond a maximum safe tilt position. None of the cited references teach or suggest such a function, and thus Applicants submit that the amended claims cannot be obvious and are now in condition for allowance.

5. The claims are not allowed over these limitations because Davis teaches this "means plus function" in column 27, lines 32-55.

Conclusion

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sherman D. Basinger whose telephone number is 571-272-6679. The examiner can normally be reached on Monday through Friday, 5:30 a.m. to 2:00 p.m.

Art Unit: 3617

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel J. Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Sherman Basinger
Primary Examiner
Art Unit 3617

Thursday, January 11, 2007